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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,574	05/01/2002	Guenther Mager	216536US6PCT	6347

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

MATECKI, KATHERINE A

ART UNIT	PAPER NUMBER
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3654

DATE MAILED: 02/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/031,574

Applicant(s) **SW**

MAGER ET AL.

Examiner

Katherine Matecki

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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Drawings

The drawings were received on 10/03/2002. These drawings are acceptable.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-13 and 15-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, on each of lines 10 and 11, the recitation of "the cone" is vague and indefinite because the claim fails to provide proper antecedent basis for the elements. It is unclear whether the cones on each line are the same cone, or whether they are one of the previously-recited base cone or unwind cone. Note that while lines 6 and 7 recite "a base cone (12)" and "an unwind cone (13)" reference characters in a claim do not have any affect on the scope of the invention and do not further limit or define the invention. See MPEP 608.01(m). Thus, the recitation of "the cone (12)", for example, is not construed to refer only to the base cone (12). For the same reason, the recitations of "an end section" on lines 9-10 and 11, and "a base" on lines 11 and 12, are vague and indefinite. It is unclear whether there are one or two end sections and bases. On line 11, "said base" has no proper antecedent basis in the claim. On line 16, "the end" has no proper antecedent basis.

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In claim 2, line 4-5, it is unclear what is meant by "the positions perpendicular to the support and to each of the end sections of the bobbin". A position is taken to mean a point or location, while a perpendicular relationship between the support would have to be defined by a line or plane.

With respect to claim 9, it is unclear what element is performing the plurality of motions parallel and perpendicular to the axis of the yarn guide. Although not limiting the scope of the claim, the reference character X appears to be inaccurate in this instance, because in claim 1 it is associated with the longitudinal axis of the cylindrical support (claim 1, line 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-13, 15, 16, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siegenthaler in view of De Ruig.

Siegenthaler discloses an apparatus of winding a yarn in a plurality of superposed layers onto a cylindrical (7) or frustoconical (38) support having a longitudinal axis and fastened around a spindle 6 driven in a rotational movement by gears 4 and 5 (column 1, lines 53-55). The yarn runs over a yarn guide 8 which moves in a backward and forward motion parallel to the axis of the support and

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which is controlled by cam groove 3, links 18 and 19, and rail 22 so as to form a bobbin having two frustoconical ends comprising a base cone and an unwinding cone, and a frustoconical main body, wherein the largest diameter of the base cone is larger than the largest diameter of the unwind cone (figure 10). The movement of the yarn guide is governed by rules determined by the position of the rail 22, such that the last layer of yarn deposited according to a first run extends to the end of the unwind cone. A second position of the rail 22 defines a second rule which will deposit a parallel layer.

Siegenthaler's package shown in figure 10 includes all the features of the package set forth in claim 1, except the provision of a cylindrical support; Siegenthaler shows the particular package shape claimed to be on a frustoconical support.

De Ruig shows yarn packages which are wound in cylindrical supports, including a package having the same shape as figure 10 of Siegenthaler, but wound onto a cylindrical support (figure 16 of De Ruig). De Ruig does not specifically disclose the structure of his winding apparatus.

It would have been obvious to one of ordinary skill in the art at the time the invention was made, to wind a yarn package having the shape described in the claims and on a cylindrical support, using the apparatus of Siegenthaler, as suggested by the package of De Ruig, because Siegenthaler teaches that cylindrical and frustoconical supports are known alternatives, and De Ruig teaches that the particular shape claimed may be desirably wound on a cylindrical rather than frustoconical support. One skilled in the art would possess sufficient skill to control

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the apparatus of Siegenthaler in a manner to produce the desired package. All the steps recited in the method claims are suggested by the use of the device of Siegenthaler as modified by De Ruig, in a usual and expected fashion.

Regarding claims 2-8, it would have been obvious to one of ordinary skill in the art to define the rules for winding the package of Siegenthaler as modified by De Ruig in the manner recited in these claims, because the package shape shown must inherently be wound by such rules.

Regarding claim 9, the provision of an electronic device to produce motions of the yarn guide would have been obvious to one skilled in the art, electronic controls being well known in numerous manufacturing operations, in order to product a more accurately and quickly wound product.

With respect to claim 13, it would have been obvious to one skilled in the art to vary the speed of the motor drive 1 of Siegenthaler, based on the supply characteristics of the yarn, to avoid breakage and properly control tension.

With respect to claims 15, 16, 19, and 20, the package shown by Siegenthaler shows the angles of inclination set for in the claims. The selection of the length of the bobbin, and the particular strand material wound onto the bobbin, would have been obvious to one of ordinary skill in the art, because they represent features which are within the usual scope of such packages, and which would be selected based on routine optimization and desired use.

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Allowable Subject Matter

Claims 17 and 18 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

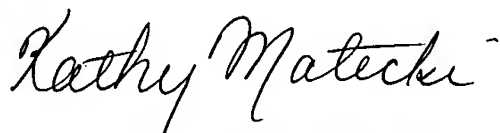
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathy Matecki, whose telephone number is (703) 308-2688.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, whose telephone number is (703) 308-1113.

The facsimile number for official correspondence related to this application is (703) 872-9326.

kam
February 6, 2004



**KATHERINE MATECKI
SUPERVISORY PATENT EXAMINER
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